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12/07/2007 18:03

#290 P.003/019

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DEC 07 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please amend claims 1, 19, 32, 34, 38 and 39 as indicated below (material to be inserted is in **bold and underline**, material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[]]):

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Serial No. 10/777,448
HP Docket No. 200309247-1
KH Docket No. HPCC 3B1

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Listing of Claims:

1. (Currently Amended) A medicament dispenser, comprising:
 - a fluid medicament supply;
 - an ejector;
 - an accumulator in fluid communication with the ejector;
 - a valve in fluid communication with the fluid medicament supply and the accumulator, wherein the valve connects the fluid medicament supply with the accumulator;
 - a sensor configured to sense an accumulator characteristic; and
 - a controller configured to operate the valve in response to the accumulator characteristic.
2. (Original) The dispenser of claim 1, where the sensor is configured to sense fluid pressure within the accumulator.
3. (Previously Presented) The dispenser of claim 1, where the sensor is configured to sense a volume defined by the accumulator.
4. (Original) The dispenser of claim 1, wherein the sensor is fluidically coupled to the accumulator.
5. (Original) The dispenser of claim 4, wherein the sensor is configured to sense pressure adjacent the ejector.
6. (Original) The dispenser of claim 1, further comprising a compliant member that regulates pressure within the accumulator.

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7. (Original) The dispenser of claim 6, wherein the compliant member is configured to regulate pressure by deforming elastically in response to changes in accumulator pressure.

8. (Original) The dispenser of claim 7, wherein the compliant member is configured to regulate negative accumulator pressure.

9. (Original) The dispenser of claim 7, wherein the sensor is coupled to the compliant member to sense the accumulator volume.

10. (Original) The dispenser of claim 1, wherein the valve includes a microvalve.

11. (Original) The dispenser of claim 10, wherein the microvalve includes an electrostatic actuator, a magnetic actuator, or a piezoelectric actuator.

12. (Original) The dispenser of claim 1, further comprising a display configured to provide information to a user of the dispenser.

13. (Original) The dispenser of claim 12, wherein the information includes the number of doses of medicament remaining in the dispenser.

14. (Original) The dispenser of claim 12, wherein the information includes an indication to replace the fluid medicament supply.

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) A method of dispensing a medicament using a medicament dispenser including a fluid medicament supply, an ejector, an accumulator in fluid communication with the ejector, a valve in fluid communication with the fluid medicament supply and the accumulator, wherein the valve connects the fluid medicament supply with the accumulator, a sensor configured to sense an accumulator characteristic, and a controller configured to operate the valve in response to the accumulator characteristic, the method comprising:

sensing a medicament pressure within the accumulator;
recharging the accumulator from the fluid medicament supply where recharging the accumulator includes opening a valve between the fluid medicament supply and the accumulator; and
ejecting medicament from the accumulator.

20. (Cancelled)

21. (Original) The method of claim 19, further comprising comparing the sensed pressure to a minimum acceptable medicament pressure within the accumulator.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)
29. (Cancelled)
30. (Cancelled)
31. (Cancelled)
32. (Currently Amended) An inhaler, comprising:
a fluid medicament supply means;
an ejector means;
an accumulator means in fluid communication with the ejector means;
a valve means in fluid communication with the fluid medicament supply means
and the accumulator means, wherein the valve connects the fluid medicament supply means with the accumulator means;
a sensing means configured to sense a characteristic of the accumulator means;
and
a controller means configured to operate the valve means in response to the sensed accumulator characteristic.
33. (Original) The inhaler of claim 32, further comprising a compliant regulating means configured to regulate pressure within the accumulator means.

34. (Currently Amended) A medicament dispenser, comprising:
a fluid medicament supply;
an ejector;
an accumulator in fluid communication with the ejector;
a valve in fluid communication with the fluid medicament supply and the
accumulator;
a sensor configured to sense an accumulator characteristic; and
a controller configured to operate the valve in response to the accumulator
characteristic; and
a compliant member that regulates pressure within the accumulator The
pressure regulator of claim 6, wherein the compliant member is a resilient member.

35. (Previously Presented) The pressure regulator of claim 5, wherein the controller is configured to operate the valve to increase the pressure adjacent the ejector.

36. (Previously Presented) The method of claim 21, further comprising sensing a second medicament pressure within the accumulator and comparing the second pressure to a desired pressure.

37. (Previously Presented) The method of claim 36, where the second pressure is less than the desired pressure, further comprising generating a notification that the fluid medicament supply should be renewed.

38. (Currently Amended) A method of dispensing a medicament using a medicament dispenser including a fluid medicament supply, an ejector, an accumulator in fluid communication with the ejector, a valve in fluid communication with the fluid medicament supply and the accumulator, a sensor configured to sense an accumulator characteristic, and a controller configured to operate the valve in response to the accumulator characteristic, the method comprising:

sensing a medicament pressure within the accumulator;
recharging the accumulator from the fluid medicament supply where recharging the accumulator includes opening a valve between the fluid medicament supply and the accumulator ~~The method of claim 19, where recharging the accumulator relaxes a compliant member that is fluidically coupled to the accumulator; and~~

ejecting medicament from the accumulator.

39. (Currently Amended) A method of dispensing a medicament using a medicament dispenser including a fluid medicament supply, an ejector, an accumulator in fluid communication with the ejector, a valve in fluid communication with the fluid medicament supply and the accumulator, a sensor configured to sense an accumulator characteristic, and a controller configured to operate the valve in response to the accumulator characteristic, the method comprising:

sensing a medicament pressure within the accumulator;
recharging the accumulator from the fluid medicament supply where recharging the accumulator includes opening a valve between the fluid medicament supply and the accumulator The method of claim 19, where recharging the accumulator flexes a compliant member that is fluidically coupled to the accumulator; and

ejecting medicament from the accumulator.